

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:
a supporting substrate made of insulating material;
5 a conductive pattern provided on a surface of the supporting substrate;
an external connecting terminal provided on a back surface of the supporting substrate and electrically connected to the conductive patterns;
10 a circuit element provided on the conductive pattern;
a glass plate that covers the circuit element and that forms a hollow airtight portion between the supporting substrate and the glass plate; and
15 an adhesive resin applied to an overall adhered surface of the glass plate.

2. A semiconductor device according to claim 1, wherein the adhesive resin is formed of a light-shielding adhesive resin.

3. A semiconductor device according to claim 1, wherein the circuit element includes a semiconductor element or a fuse element.

4. A semiconductor device manufacturing method

comprising steps of:

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5 preparing a supporting substrate in which a conductive pattern having a large number of mounting portions on a surface of the supporting substrate is provided and external connecting terminals are provided on a back surface;

fixing the circuit element onto the mounting portions respectively;

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10 applying an adhesive resin to an overall adhesive surface of a glass plate that covers the circuit element and forms an airtight hollow portion between the supporting substrate and the glass plate every mounting portion;

adhering the supporting substrate and the glass plate to form the airtight hollow portion every mounting portion; and

15 dividing the supporting substrate into respective mounting portions by dicing adhered portions between the supporting substrate and the glass plate.

20 5. A semiconductor device manufacturing method according to claim 4, wherein the adhesive resin is formed of a light-shielding adhesive resin.

6. A semiconductor device manufacturing method comprising steps of:

25 preparing a supporting substrate in which conductive

patterns having a number of mounting portions thereon are provided on a surface of the supporting substrate and external connecting terminals are provided on a back surface of the supporting substrate;

5 fixing a circuit element onto respective mounting portions;

 mounting a lattice-like column member on the supporting substrate;

10 applying an adhesive resin to an overall adhesive surface of a glass plate that covers the circuit element and forms an airtight hollow portion between the supporting substrate and the glass plate every mounting portion;

15 adhering a glass plate onto the column member to cover the circuit element and to form a hollow airtight portion formed by the supporting substrate, the column member and the glass plate every mounting portion; and

20 dividing the supporting substrate into respective mounting portions by dicing adhered portions between the supporting substrate and the glass plate.

7. A semiconductor device manufacturing method according to claim 6, wherein the adhesive resin is formed of a light-shielding adhesive resin.

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